AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION

On page 22, line 32 to page 23, line 8, please replace the original paragraph with the following amended paragraph:

-- Briefly, *Paracoccus* sp. MBIC 01143 (*Agrobacterium aurantiacum*)-derived *crtW* gene was synthesized so that the codon usage is consistent with in *GAP* gene in yeast *Candida utilis.* The amino acid sequence encoded by the resultant *crtW* was made identical with the amino acid sequence of the original CrtW. This method is described previously (Miura et al., 1998). With this totally synthesized *crtW* sequence as a template, PCR was performed using H1437 primer [containing *Ava*I site (underlined) and SD sequence (positions 10-15 of H1437)] and H1438 primer [containing *Not*I site (underlined)]. The resultant PCR product was digested with *Ava*I and *Not*I to obtain a 0.76 kb *Ava*I-*crt*W-*Not*I fragment.

H1437: 5'-GTCCCGAGAAGGAGGCTAGATATGTCCGCTCACGCTTTGC-3' (SEQ ID NO: 33)

H1438: 5'-CGGCGGCCGCCCGGGACTAAGCGGTGTCACCCTTGGTTCT-3'(SEQ ID NO: 34) - -

On page 23, line 11, please replace the original paragraph with the following amended paragraph:

-- With plasmid pCAR16 (Misawa et al., 1990) as a template, PCR was performed using H1431 primer [containing *Not*I site (underlined) and SD sequence (positions 16-21 of H1431)] and H1432 primer [containing *Sal*I site (underlined)]. The resultant PCR product was digested

with *Not*I and *Sal*I to obtain a 1.1 kb *Not*I-*crtE*-*Sal*I fragment.

H1431: 5'-ATGCGGCCGCTTATAAGGACAGCCCGAATG-3' (SEQ ID NO: 35)

H1432: 5'-CAGTCGACATCCTTAACTGACGGCAGCGAG-3' (SEQ ID NO: 36) --

On page 25, line 26 to page 26, line 14, please replace the original paragraph with the following amended paragraph:

-- A partial fragment of phytoene desaturase gene (*crtI*) was amplified by PCR using crtI-Fo primer (5'-TTY GAY GCI GGI CCI ACI GT -3') (SEQ ID NO: 37) and crtI-Re primer (5'-CCI GGR TGI GTI CCI GCI CC-3') (SEQ ID NO: 38) (which had been designed utilizing the homology of *crtI* genes among carotenoid producing bacteria) and the chromosomal DNA from *Brevundimonas* sp. strain SD-212 obtained as described above as a template. As a thermal resistance DNA polymerase, La-Taq (TaKaRa) was used. After thermal denaturation at 96°C for 5 min, 35 cycles of 98°C for 20 sec, 58°C for 30 sec and 72°C for 1 min were carried out. The amplified products were confirmed by 1% agarose gel electrophoresis. Then, a 1.1 kb DNA fragment was cut out from the gel and purified with Qiagen Gel Extraction kit (QIAGEN) or Gene Clean II Kit (BIO101). The purified DNA fragment was ligated to pGEM-T Easy and transformed into *E. coli* (DH5α). This plasmid was designated pCRTI-SD212. The *E. coli* was cultured in 2 ml of ampicillin-added LB liquid medium at 37°C overnight, followed by extraction of the plasmid. The nucleotide sequence (partial) of the extracted plasmid was determined using a DNA sequencing kit (Big Dye Terminator Cycle Sequencing Ready Reaction Kit ver.2; Perkin-Elmer) and a model 3700 DNA sequencer (Perkin-Elmer) according to the protocol attached. The thus determined DNA sequence (SEQ ID NO: 1) was subjected to homology search using Blast (Altschul and Lipman, 1990). As a result, it was confirmed that this DNA sequence has a homology to phytoene desaturase gene (*crtI*). A part of the PCR amplified and purified DNA fragment was used as a probe in the colony hybridization and Southern hybridization conducted in Examples 7 and 8. --